

Serial No. 09/638,373

- 2 -

Art Unit: 2662

In the Claims:

1. (currently amended) A method of allocating resources on a network, comprising:
receiving a request for reservation of network resources, the reservation including a destination address on the network;
receiving data indicating a future an activation time that the resources are to be activated;
and
allocating resources on network devices on a path to the destination address to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation, wherein the allocating is at the activation time.
2. (original) The method of claim 1, further comprising determining if the network devices on the path to the destination address have sufficient resources to accommodate the reservation.
3. (original) The method of claim 2, further comprising:
constructing a map of a topology of the network; and storing the map in memory;
wherein determining and allocating are performed by referencing the map.
4. (original) The method of claim 3, wherein constructing is performed periodically to account for changes in the topology of the network.
5. (original) The method of claim 1, further comprising:
determining if the reservation is permitted based on an identity of a transferor;
wherein allocating is performed if it is determined that the reservation is permitted.

Serial No. 09/638,373

- 3 -

Art Unit: 2662

6. (original) The method of claim 5, wherein allocating is not performed if it is determined that the reservation is not permitted.

7. (original) The method of claim 1, wherein allocating comprises installing filters on the network devices to allocate the resources.

8. (previously amended) The method of claim 7,
wherein the filters are installed at the allocation time that the resources are to be activated.

9. (original) The method of claim 1, wherein allocating comprises allocating resources on the network devices for different classes of service on the network.

10. (original) The method of claim 9, wherein the different classes of service are defined in data packets to be transmitted over the network.

11. (original) The method of claim 1, wherein the resources comprise bandwidth of devices on the network.

12. (original) The method of claim 1, further comprising determining if the destination address is along a path having greater than a predetermined amount of bandwidth;
wherein allocating is performed based on the determining.

13. (original) The method of claim 1, wherein allocating comprises communicating with the network devices.

14. (original) The method of claim 13, wherein communicating takes place using the COPS/RSVP protocol.

Serial No. 09/638,373

- 4 -

Art Unit: 2662

15. (currently amended) A computer program stored on a computer-readable medium for allocating resources on a network, the computer program comprising instructions that cause a computer to:

receive a request for reservation of network resources, the reservation including a destination address on the network;

receive data indicating a future ~~an~~ activation time that the resources are to be activated;
and

allocate resources on network devices on a path to the destination address at the activation time to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.

16. (original) The computer program of claim 15, further comprising instructions that cause the computer to determine if the network devices on the path to the destination address have sufficient resources to accommodate the reservation.

17. (original) The computer program of claim 16, further comprising
instructions that cause the computer to:
construct a map of a topology of the network; and store the map in memory;
wherein determining and allocating are performed by referencing the map.

18. (original) The computer program of claim 17, wherein constructing is performed periodically to account for changes in the topology of the network.

19. (original) The computer program of claim 15, further comprising instructions that cause the computer to:

determine if the reservation is permitted based on an identity of a transferor;
wherein allocating is performed if it is determined that the reservation is permitted.

20. (original) The computer program of claim 19, wherein allocating is not performed if it is determined that the reservation is not permitted.

Serial No. 09/638,373

- 5 -

Art Unit: 2662

21. (original) The computer program of claim 15, wherein allocating comprises installing filters on the network devices to allocate the resources.

22. (previously amended) The computer program of claim 21,
wherein the filters are installed at the activation time that the resources are to be activated.

23. (original) The computer program of claim 15, wherein allocating comprises allocating resources on the network devices for different classes of service on the network.

24. (original) The computer program of claim 23, wherein the different classes of service are defined in data packets to be transmitted over the network.

25. (original) The computer program of claim 15, wherein the resources comprise bandwidth of devices on the network.

26. (original) The computer program of claim 15, further comprising instructions that cause the computer to determine if the destination address is along a path having greater than a predetermined amount of bandwidth wherein allocating is performed based on the determining.

27. (original) The computer program of claim 15, wherein allocating comprises communicating with the network devices.

28. (original) The computer program of claim 27, wherein communicating takes place using the COPS/RSVP protocol.

29. (currently amended) An apparatus for allocating resources on a network, the apparatus comprising:

a memory which stores executable instructions;

and a processor which executes the instructions to:

Serial No. 09/638,373

- 6 -

Art Unit: 2662

receive a request for reservation of network resources, the reservation including a destination address on the network;

receive data indicating a future an activation time that the resources are to be activated;
and

allocate resources on network devices on a path to the destination address at the activation time to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.

30. (original) The apparatus of claim 29, wherein the processor executes instructions to determine if the network devices on the path to the destination address have sufficient resources to accommodate the reservation.

31. (original) The apparatus of claim 30, wherein the processor executes instructions to:
construct a map of a topology of the network; and
store the map in memory wherein determining and allocating are performed by referencing the map.

32. (original) The apparatus of claim 31, wherein constructing is performed periodically to account for changes in the topology of the network.

33. (original) The apparatus of claim 29, wherein:
the processor executes instructions to determine if the reservation is permitted based on an identity of a transferor; and
allocating is performed if it is determined that the reservation is permitted.

34. (original) The apparatus of claim 33, wherein allocating is not performed if it is determined that the reservation is not permitted.

35. (original) The apparatus of claim 29, wherein allocating comprises installing filters on the network devices to allocate the resources.

Serial No. 09/638,373

- 7 -

Art Unit: 2662

36. (previously amended) The apparatus of claim 35, wherein
the filters are installed at the activation time that the resources are to be activated.
37. (original) The apparatus of claim 29, wherein allocating comprises allocating resources on the network devices for different classes of service on the network.
38. (original) The apparatus of claim 37, wherein the different classes of service are defined in data packets to be transmitted over the network.
39. (original) The apparatus of claim 29, wherein the resources comprise bandwidth of devices on the network.
40. (original) The apparatus of claim 29, wherein:
the processor executes instructions to determine if the destination address is along a path having greater than a predetermined amount of bandwidth; and
allocating is performed based on a determination made by the processor.
41. (original) The apparatus of claim 29, wherein allocating comprises communicating with the network devices.
42. (previously amended) The apparatus of claim 41, wherein communicating takes place using the COPS/RSVP protocol.
43. (currently amended) An apparatus for allocating resources on a network, comprising:
means for receiving a request for reservation of network resources, the reservation including a destination address on the network;
means for receiving data indicating a future ~~an~~ activation time that the resources are to be activated; and

Serial No. 09/638,373

- 8 -

Art Unit: 2662

means for allocating resources on network devices on a path to the destination address at the activation time to accommodate the reservation if the network devices have sufficient resources to accommodate the reservation.